Statement of

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Before the
Subcommittee on Railroads
Committee on Transportation and Infrastructure
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Chairman LaTourette, ranking member Brown, and other members of the Subcommittee, it is my pleasure today to represent Secretary of Transportation Norman Y. Mineta to discuss the critical issue of capacity of our freight transportation system and the ability of the nation's freight railroads to contribute solutions.

Today, I will talk about the economic cost of insufficient capacity and resulting congestion, how the problem only worsens if freight and transportation demand forecasts are accurate, how railroads have up until now been meeting demand growth with strategic investments, and how more will be needed to meet capacity requirements.

But first, I want to highlight the success of railroad deregulation as a backdrop to where we are today. The Staggers Act was the most important in a series of major railroad reform and deregulatory legislation. Now, twenty-five years later, it is clear to the Department that this legislation has been an unqualified success. The major railroads are financially healthy, the industry infrastructure has been modernized, productivity is high, and shippers have enjoyed the benefits of lower average rates. Prior to Staggers, nine major railroads were in bankruptcy or receivership, rail market share was declining in the face of steadily rising rates and poor service, and the rail plant was in a sorry state.

While the challenges following deregulation were met, the railroad industry, indeed the entire transportation sector, faces new challenges not dreamt of in 1980. These are the challenges of success; demand for freight transportation, reflecting the growing economy, strains the existing infrastructure overall. Increased highway congestion, higher fuel prices, and concern about the environment all indicate that the rail industry will be asked to do more in the future. The Staggers Act was meant to make the industry viable. It has done that.

INTRODUCTION

Transportation efficiency, long a strategic U.S. asset, is decreasing.

The capacity of our freight highway and rail network has not kept pace with the growing demand for freight transportation. These inefficiencies add additional and unnecessary cost to every sector of our economy through delays in goods movement and unreliable delivery times.

The data bear this out. The Federal Highway Administration reports that, since 1990, vehicle miles traveled (VMT) has grown over 38 percent while lane miles increased by little over three percent. Hours of delay on our nation's highways increased by over 117 percent. For rail, since 1990, the network measured in miles-of-road owned has not expanded -- indeed, it has decreased by almost 19 percent -- but revenue ton-miles increased by 60 percent. While much of the system needed paring back due to redundancy and unused and light density lines, traffic on the remaining portion is moving over heavily traveled corridors. This has resulted in a reduction in system average train speed by nearly 20 percent, accompanied by network congestion and deterioration in service reliability.

Generations have been accustomed to a resilient transportation system. But those days are over. Rob Ritchie, CEO of Canadian Pacific Railway, characterized the situation: "The North American railroads' network holiday is over -- the rail industry is **finally** [emphasis added] running enough freight trains to consume the capacity of the network."

Insufficient capacity is expensive.

Constrained transportation capacity is a cost we all pay, whether or not we drive. Every motorist has experienced the frustration of sitting in traffic backed up because of insufficient peak period highway capacity -- and the peaks have been getting longer and longer. In its 2004 Conditions and Performance Report, the Federal Highway Administration reported that cities with populations between 500,000 and 1 million saw an increase of nearly 180 percent in the average annual delay experienced by drivers, from 5.9 hours in 1987 to 16.5 hours in 2002. For the same period, drivers in cities with populations between 1 million and 3 million experienced average annual delays of 29.5 hours, up from 9.3 hours. And drivers in cities with populations over 3 million experienced 35.6 hours of delay, up from 30.6 hours. The Texas Transportation Institute's 2005 Urban Mobility Study estimates that the aggregate cost of highway congestion is \$63 billion, just for wasted fuel and extra hours of travel time, and there are other significant costs more difficult to quantify. These include lost productivity of those waiting in traffic, and increased levels of harmful emissions, with their associated health disorders. All these costs are borne by society in one way or another.

Everyone bears the burden of freight-related congestion as well. Constrained capacity adds extra cost to virtually all goods and services produced in the economy. The resulting congestion adds to direct transportation cost and also forces companies to carry larger inventories and invest in increased warehouse space -- making U.S. businesses less competitive here and abroad.

FREIGHT DEMAND

<u>Until recently, freight growth and surge demand were met by improved productivity and excess capacity.</u>

Up to now, the cushion of excess capacity, combined with significant productivity gains over the past 20 years, has allowed the rail system to handle growing demand, even the recent surges.

Like the nation's highway system, the rail industry had excess capacity for decades. For the highways, traffic grew onto a defined system that has been in place since the completion of the Interstate system in the early 1980s. The rail system, measured in miles-of-road, was largely complete in the 19th century, reaching its peak in the 1920s. Even though competition from trucking soared with the growth of the Interstate system, significantly reducing rail market share, rigid regulation kept carriers from streamlining and restructuring until passage of the Staggers Act in 1980. The Act provided railroads the flexibility they needed to compete in an ever more dynamic transportation environment, by allowing the use of differential pricing and contracts in setting rates. To the surprise of many, rate flexibility led to sustained declines in real (inflation adjusted) rail rates. Freight rates declined by an average of 1.3 percent per year between 1990 and 2003. And, from its passage in 1980 through the 1990s, the Staggers Act allowed the rail industry to concentrate on paring its system to accommodate relatively stagnant traffic; new capacity was added only where there was proven growth.

Even though the physical system was shrinking, record productivity gains allowed the railroads to carry much more traffic. From 1987 to 1999, railroad productivity grew by nearly 48 percent, while traffic measured in ton-miles grew by nearly 52 percent. (In comparison, the US manufacturing sector as a whole increased productivity by only 16.1 percent during the same period.) Tons originated grew by over 25 percent with coal, chemicals, metal products, and motor vehicles and equipment leading the way. Rail intermodal shipments, measured in units shipped, grew by 73 percent. The locomotive fleet grew by only one percent, but new units are now able to haul more trailing tons; lighter and larger freight cars now carry heavier payloads. The mergers over the past decade also added efficiencies to the system, bringing large networks under more central control and reducing duplicate facilities. Overall, the industry has been able to improve productivity on every part of the system. Investments to enhance productivity ultimately reduce transportation costs and benefit consumers.

All freight demand forecasts predict increasingly limited capacity.

At its root, congestion is a byproduct of a vibrant economy and the demands it imposes on transportation infrastructure. In 2005 alone, the Nation's real Gross Domestic Product grew 3.5 percent, above the historical average. The Department's Bureau of Transportation Statistics' Transportation Services Index shows that freight transportation demand is at record levels. Since the economy began its recovery in 2001, the Freight Service Index has grown by over 14 percent, and the overall trend is expected to continue. Global Insight, Inc., an economic forecasting firm, projects growth in tons for

rail for this year at 2.5 percent, while trucking is expected to grow by 3.3 percent. Similarly, the Federal Highway Administration's Office of Freight Operations forecasts that overall demand for freight transportation will grow 43 percent by the year 2020. The rail freight system's traffic growth is forecast at 35 percent to maintain its present share of the freight market, and substantially more if highway congestion or public policy drives more freight from roads to rail.

Congestion on our highways, at our seaports, and at major border gateways with Canada and Mexico already imposes costly delays on the movement of freight. Current global trade, particularly with Asia, is straining our seaports and shifting truck and rail patterns and routes to inland consumption areas. The freight forecasts that I've just cited carry with them the prospect of more frequent disruptions if solutions are not implemented.

Even now, events that once would have had little effect now cause major disruptions throughout the rail network, because there is no reserve capacity. Last year is a good example. West Coast storms interrupted shipments from California ports to the east, and forced eastern carriers to hold traffic moving west; the result was filled yards and a clogged rail system. In the Powder River Basin, necessary track work and severe winter weather slowed delivery of coal to utilities.

Increased demand for rail freight transportation also affects efforts to provide commuter rail services in urban areas. Commuter rail operations that operate over lightly used track may be relatively easy to implement. However, on main railroad lines, where traffic is steadily increasing, new or expanded commuter operations may require additional investment in capacity, to accommodate both passenger and freight needs.

The era of inexpensive transportation is over. Providing new capacity to meet needs will be costly; the private sector is the best judge of where that capacity is most needed.

Providing new transportation capacity is costly. In addition to rapidly rising fuel costs, construction materials -- primarily steel, concrete and wood products -- are outpacing inflation. Land for new or expanded rights-of-way, terminals and other infrastructure is expensive to acquire. Nonetheless, railroads are making these investments.

But too much, or too little, capacity is even more costly. If the system has excess capacity, then economic theory tells us that resources are not being used efficiently. On the other hand, a shortage of capacity also proves costly through congestion, service deterioration and the increased cost of moving goods. The goal is to size the transportation system with the optimum allocation of resources. Attaining this balance is extremely challenging because significant rail projects are expensive and require significant lead times.

¹ Freight Analysis Framework growth rates from 2005 to 2020

<u>MEETING DEMAND – INFRASTRUCTURE, TECHNOLOGY, AND</u> OPERATIONS

Railroads are investing in additional capacity.

Freight railroading is among the most capital-intensive of industries. The railroad industry's capital expenditures from 1990 through 2005 totaled nearly \$90 billion. The industry reports that as a general rule, 15 to 20 percent of that investment for any given year goes to capacity expansion. This includes investments to double- and triple-track strategic sections, improvements to yards, new locomotives, rolling stock, and investment in new technologies, all designed to improve operations and respond to customer demands. The remaining 85 percent goes to maintaining the system in its current condition. Additionally, during this same period, another \$175 billion was expensed for maintenance-of-way and maintenance-of-equipment.

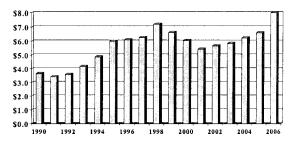
The following charts give an indication of railroad spending, how spending has kept up with growth, and how much is available for investment.

Chart 1 shows railroad capital expenditures between 1990 and today. In the early part of the decade, when the rail industry was shedding capacity, spending levels were \$3.5 to \$4 billion. With the mergers from 1995 through 2000, spending levels grew to the \$6-7 billion range. As the economy began its growth in 2001, capital expenditures steadily increased from their low point of \$5.4 billion to a projected \$8 billion this year.

As Chart 2 shows, growth in capital expenditures generally outpaced growth in revenue ton-miles until 2001, when it began to fall behind the surge in traffic growth.

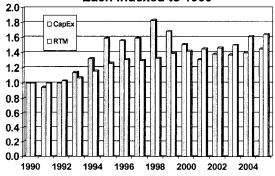
Chart 3 compares capital expenditures to operating revenue, showing the percentage of revenue that railroads have invested in maintaining and expanding their systems. The spike from 1995 to 2000 reflects merger activity, but overall the chart shows that

Chart 1 Class I Railroads Capital Expenditures (Dollars in Billions)



Source: Assn. Of American Railroads, "Railroad Facts," various for historic results 2006 investment level from AAR press release

Chart 2
Index of Capital Expenditures* and Index of
Revenue Ton-Miles
Each Indexed to 1990

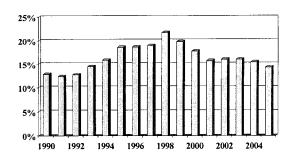


Source: Assn. Of American Railroads, "Railroad Facts." * Capital Expenditures are in constant 1990 dollars

railroads can consistently invest at least 15 percent of their operating revenues.

In addition to annual growth in capital spending from increasing revenues, the industry appears to have the financial resources to raise additional capital for capacity expansion. According to industrial sector data compiled by New York University's Leonard Stern School of Business, the U.S. railroads² debt ratio [defined as (long term debt)/(long term debt + shareholders equity)] has improved by a little over 25 percent in recent years, moving from 41 percent in 2000 to 30 percent in 2004. (Out of 100 industry sectors in this database, ranked from most to least debt, railroads consistently ranked 23, meaning that

Chart 3 Class I Railroads Ratio of Capital Expenditures to Operating Revenues



Source: Assn. Of American Railroads, "Railroad Facts."

only 22 other sectors had worse ratios.) Using AAR data, if the analysis is confined to the seven Class I railroads, it appears the industry has the capability of assuming up to \$4 billion in additional debt.

Railroad investments must meet the test of the marketplace.

As the discussion above makes clear, the industry's capital expense budget, while large compared to other sectors, is not unlimited. Railroads judge a project by testing its expected internal rate of return against a pre-set hurdle rate. Projects with the highest return are funded first, followed in order by others until available investment capital is exhausted. Carriers must be confident that the investment will be justified by traffic levels or cost-saving operational improvements. Even projects with high rates of return may not be funded if there are other, better, uses for the money.

This review process has produced many significant projects that expand rail capacity. For example, The Burlington Northern Santa Fe has nearly completed double-tracking its transcontinental route from California to Chicago. Union Pacific is double-tracking its Sunset Route, which serves the same markets. Both carriers are continuing to triple-track their Powder River Basin joint line, to improve the movement of low sulfur coal to the nation's utilities. Similarly, other Class I's are expanding yards, double and triple-tracking rights of way and working out operational agreements that increase capacity. This month, Norfolk Southern Railway (NS) and Kansas City Southern Railway (KCS) received regulatory approval for their joint venture to improve capacity along KCS's Meridian Speedway, a 320-mile line between Meridian, MS and Shreveport, LA. NS is investing \$300 million in this project. In addition, CSX is adding capacity on its rail lines between Chicago and Florida, and between Albany, New York and New York City. Overall CSX plans to spend \$255 million on capital expansion projects. The industry is also expected to add over 800 locomotives this year and hire over 12,000 new employees.

² Analysis was comprised of 18 selected U.S. railroads, which includes more than the Class I's.

New rolling stock is also being added to handle the increase in business.

New technology will improve capacity.

New terminals and expanded rights-of-way are not the only means to increase rail freight capacity. Investment in new technology also holds significant promise. Two of the most important opportunities available today are Positive Train Control (PTC) and Electronically Controlled Pneumatic (ECP) brakes. The industry and FRA have researched each extensively.

Under PTC, enhanced communications and real-time information reduce headways and improve train speeds and safety. The information provided by PTC will permit more effective management of train movements over the affected infrastructure. These improvements will eventually allow the carriers to move more freight over the system without adding track or equipment. Better train speeds improve a carrier's asset utilization. Consider that a 1 mph increase in average train speed can save large railroads an estimated \$200 million a year. By moving freight a littler quicker over long distances with the same number of trains and crews, the effective number of workers and locomotives per mile falls, generating large efficiencies. PTC is not yet a reality across the general rail system. However, very substantial technical progress has been achieved, and now momentum appears to be increasing toward wide-scale implementation

Research and actual implementation has shown that ECP brakes offer major benefits to the rail industry. In addition to improved train handling, car maintenance, and fuel savings, ECP brakes also offer increases in network capacity.

Each system requires substantial investment on the part of the railroads. Investment in either of these technologies offers additional choices to improve capacity. But as with any expenditures, railroads will require these investments to meet the rate-of-return test, based on real-world assumptions.

The bottom line on any rail expansion is the requirement by investors for an adequate return on that investment. The industry appears to be making capacity-enhancing investments at a responsible pace, but is unlikely to invest to meet what it observes as surge demand. But even at this pace, there is still some question whether the industry can keep up with the growing levels of traffic. Chart 4 shows the decline in train speed

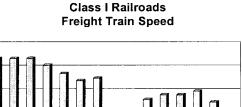


Chart 4

17 15 1990 1992 1994 1996 1998 2000 2002 2004

Source: Assn. Of American Railroads, "Analysis of Class I Railroads." Measure of Freight Train-Miles per Freight Train-Hour

since 1990 as an indicator of service levels and asset utilization.

PUBLIC BENEFITS OF ADDITIONAL CAPACITY

There are often public benefits to expanding rail.

Rail transportation can provide significant public benefits. For example, a single intermodal train leaving the Ports of LA/Long Beach represents 280 fewer trucks on the highways between Los Angeles and Chicago. In one day, 50 intermodal trains, the equivalent of 14,000 trucks, leave Los Angeles. Various studies show that rail is anywhere from three to ten times more energy-efficient than intercity trucking, an important consideration in times of rising fuel prices. Rail is also the safest way to transport freight over land. Substituting rail for long distance trucks reduces highway congestion, road maintenance costs and truck VMT. Reductions in VMT reduce highway exposure and deaths.

Many individual rail and rail-related projects provide specific significant public benefits along with private benefits. The \$2.43 billion Alameda Corridor project separated local streets and a heavily used rail line, eliminating grade crossings and reducing vehicular congestion. In addition to providing local benefits, the Corridor has eased congestion at the Ports of LA/Long Beach by facilitating faster intermodal service between the Southern California ports and receivers in the Midwest and East.

Brownsville, Texas recently completed a project begun in 1973 to relocate in-city rail yards and deactivate 79 of the city's 93 grade crossings. The project, which cost \$52 million, provided smoother rail operations and took the majority of traffic from the Port of Brownsville out of the downtown business district.

Another successful project is the Norfolk Southern's Shellpot Bridge rebuilding in Wilmington, Delaware. The bridge's poor condition caused the previous owner, Conrail, to take the bridge, and consequently the line serving the east side of Wilmington, out of service. Freight moved through the city and rail service to industries on Wilmington's east side was degraded. The parties realized that rebuilding the bridge and reopening the line would improve efficiency and capacity for north/south freight traffic, lessening freight on a passenger route and providing economic benefits to Wilmington and Delaware. NS had limited capital to finance the \$13 million project; however, the state used a combination of grants and loans to rehabilitate the bridge, with the loans to be repaid through a per-car user fee. The project has been a success; NS reports that the line has attracted new business, car counts are up, and available capacity at the Edgemoor Yard in Wilmington is now being used.

In none of these projects, nor in many others underway or on the drawing boards of transportation planners, were the returns to the rail carriers involved sufficient to justify funding the entire cost of the endeavor. Nor could the public bodies accomplish the projects by themselves. However, through successful collaboration and innovative uses of funds, both the public and private sectors benefited.

TODAY'S SOLUTIONS

Expanding rail capacity will require investment from several partners.

The rail industry has been clear that it is committed to expanding capacity -- at a pace and a level justified by available capital and project-by-project rates of returns. But that investment, reasonable from a railroad perspective, may not be sufficient to respond to nationwide capacity and congestion issues. One view of this, from a state DOT perspective, can be found in the American Association of State Highway and Transportation Officials' 2003 Freight-Rail Bottom Line Report. That study estimated that the rail system would need to invest between \$9 and \$10 billion per year to maintain current traffic and accommodate a "fair share" of forecast growth. The study noted that the rail industry could be expected to cover \$6 to \$7 billion; the remainder had to come from other sources. Public/private partnerships, such as the Alameda Corridor project, Delaware's rehabilitation of Norfolk Southern's Shellpot Bridge, and the Brownsville rail relocation provide one approach to increasing capacity.

State and local public-private partnerships provide a logical, market-based approach to address the returns demanded by private capital and the public benefits needed by communities and governments. Each party to the partnership accepts the risks it can manage and the returns it must receive. It competes for use of capital to assure an efficient allocation process. In addition to the three noted above, examples of successful public-private partnerships, financed through a variety of mechanisms, include:

The Alameda Corridor-East

This project is being undertaken in anticipation of the growth in train traffic into and out of the ports of LA/Long Beach. The project is designed to mitigate the effects of the growth of this traffic on urban streets and thoroughfares. Estimated to cost \$950 million, the project to be completed in two phases will improve at grade crossing along a 35-mile corridor. Overall, the project will improve 39 crossings, making them safer and reducing the amount of time that motorist must wait. Railroad and public funding (including local contributions) has been secured through the completion of Phase 1.

Kansas City Flyovers

Kansas City has completed two projects that improve the flow of rail traffic through the area. These projects include the Sheffield Flyover, a 3-mile \$74 million project opened in 2000, and the Argentine Connection, a 2-mile \$60 million flyover opened in 2004. The Sheffield Project helped reduce delays of as many as 250 trains by eliminating at-grade intersections of several railroads. Similarly, the Argentine Project reduced delays for 80 trains through the Kansas City Terminal area. Each project was financed through special bonding authority, to be paid off through user fees. The projects improve rail flows and eliminate significant congestion on area roads and highways.

Public-private partnerships are not a panacea, however. The rail industry's willingness, and ability, to enter into them is constrained by available funds, the level of private benefits that would accrue, and competing projects with better internal rates of return.

There is a mix of programs available at the federal level to fund rail projects. There are two loan programs that could fund rail capacity expansion -- the Railroad Rehabilitation and Infrastructure Financing (RRIF) and Transportation Infrastructure Finance and Innovation Act (TIFIA) programs; both require a guaranteed revenue stream to secure the loan. Some rail-oriented projects received funding under the new Projects of National Significance program initiated in SAFETEA-LU. Other opportunities include private activity bonds for intermodal terminals, and federal highway funds (the Section 130 program) available to improve the safety of rail-highway grade crossings. On the state and local level, the public share of some projects has been provided through taxes, transportation and/or economic development funds and other financing mechanisms.

This mix of programs, and constrained private resources, may be why many of the more ambitious public/private projects developed in recent years to expand capacity and eliminate congestion have not yet gotten underway.

One notable example is the Chicago Regional Environmental and Transportation Efficiency Project (CREATE). CREATE is an agreement between six railroads, the City of Chicago and the state of Illinois to develop five rail corridors, including one primarily for passenger trains, construct 25 new grade separations, build six rail-to-rail "flyovers" to separate freight and passenger trains and convert the St. Charles Air Line elevated railroad tracks to public use. This is an ambitious \$1.5 billion project that would improve the flow of rail freight and passenger traffic through one of the most important -- and congested -- rail hubs in the country, and mitigate the adverse effects of increased traffic on the local community. The freight railroads agreed to commit \$212 million, covering what they believe to be the operational benefits they would receive from the project. SAFETEA-LU provided another \$100 million.

A plan developed in Houston is aimed at rationalizing the maze of rail lines and terminals that serve the city's port and its extensive chemical industry. A major objective of the plan is to eliminate at-grade rail highway crossings and the congestion associated with them. It is my understanding that at this point no project financing commitments have been make by public agencies, or railroads.

The Mid-Atlantic Rail Operations Study (MAROps) was a joint study by NS, CSX Railroad, and AMTRAK. The study identified infrastructure bottlenecks in five Mid-Atlantic States (New Jersey, Pennsylvania, Delaware, Maryland, and Virginia). Removing these rail constraints could attract more freight to this corridor, lessening truck congestion on I-95 and parallel routes. It delineated improvements in three time periods: near term, mid-term and long term. The total cost is estimated to be \$6.2 billion. No funds have been committed.

Alternative Financing Options

On the highway side, private ownership and operation of toll roads is generating considerable interest -- the recent acquisition of the Chicago Skyway and the Indiana Tollway by private firms is a case in point. For rail, an alternative approach may be the development of "third party" projects, where non-railroad private sector interests build and operate specific pieces of infrastructure, funding it through tolls or other user fees.

This approach is being explored in the Trans Texas Corridor, a proposed 600-mile transportation corridor from the Mexican border to Dallas, paralleling I-35. Recently a partnership of two construction firms, Cintra of Spain and Zachry from San Antonio, won a bid to develop plans for the corridor segment paralleling I-35. The company is offering to build a toll road from San Antonio to Dallas and pay \$1.2 billion to collect fees from it for up to 50 years. In addition to this project, Cintra-Zachry is offering to develop a high-speed freight rail line. The firm states that the project cost could be up to \$6 billion. It would be financed through charges to shippers, but might also look to funding from the Texas Rail Relocation Fund or other federal and state programs.

This project, as well as the two recent highway acquisitions, demonstrates that third party investors are clearly interested in supplementing transportation investment in the U.S. Similar third party ownership and funding is worth exploring for rail projects, particularly in congested urban areas. Rail terminals, in particular, offer a good prospect for capitalizing user fees.

Potential Barriers to Additional Investment

In today's environment, the economic regulatory framework must ensure that needed capacity investments are not discouraged. Already, high levels of demand from shippers for rail services are exacerbating tensions between carriers and shippers, with some calling for more constraints on rail rates and revenues. Since 1980, the Surface Transportation Board has administered the Staggers Act to ensure a favorable climate for rail infrastructure investment. It is important that the regulatory framework contributes to solving capacity problems rather than compounding them.

Additionally, we must find a way to address community and environmental issues associated with rail capacity expansion. The current high level of railroad operations has led to numerous complaints about noise, blocked grade crossings and reduced safety. With many communities already sensitive to changes in railroad operations, major capacity expansion may face delays unless community issues are addressed. Communities often do not realize that railroads are not required to provide noise barriers and other environmental mitigation measures as they increase train traffic. Unlike highway expansions, there are usually no public funds available to mitigate rail impacts.

CONCLUSION

Transportation congestion of both rail and highways is a significant national concern, constraining our economy and wasting resources. Demand for rail transportation is growing faster than additional capacity can be provided, leading to service problems as

traffic increases. As private firms, railroads must choose expansion projects that best fit their business plans and available capital, limiting their ability to add capacity quickly. State and local public-private partnerships are a well-tested mechanism for funding rail projects with significant public benefits, but the public sector, like the rail industry, has limited available funds. We need to add other models, such as third-party investments, where appropriate. Finally, the Federal government needs to be wary of actions that would skew the market. We should not support mechanisms that foster speculative projects based on wishful thinking. Nor should we discourage needed investment or encourage disinvestment through an unbalanced regulatory policy.